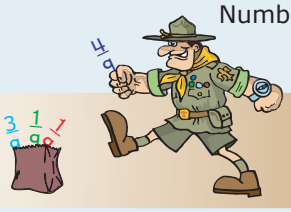
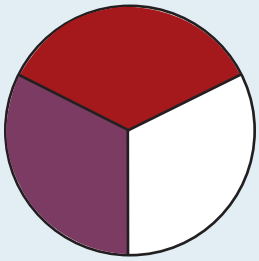
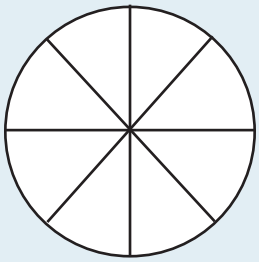
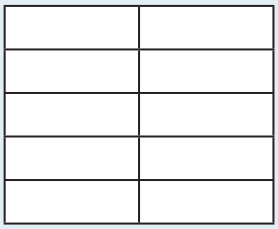


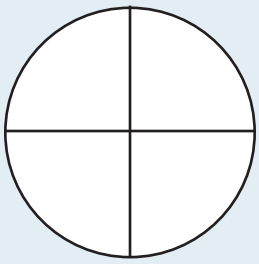
Shade each figure to show the addition and then write the sum.

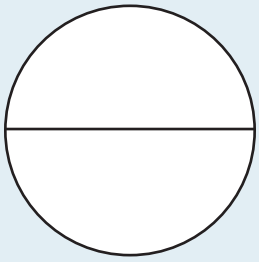
a $\frac{1}{3} + \frac{1}{3} =$  $= \frac{2}{3}$

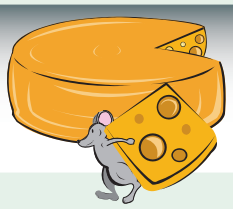
b $\frac{3}{5} + \frac{1}{5} =$  $= \frac{\quad}{\quad}$

c $\frac{3}{8} + \frac{4}{8} =$  $= \frac{\quad}{\quad}$

d $\frac{7}{10} + \frac{2}{10} =$  $= \frac{\quad}{\quad}$

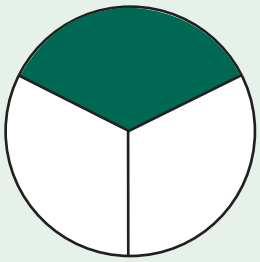
e $\frac{1}{4} + \frac{1}{4} =$  $= \frac{\quad}{\quad}$

f $\frac{1}{2} + \frac{1}{2} =$  $= \frac{\quad}{\quad}$



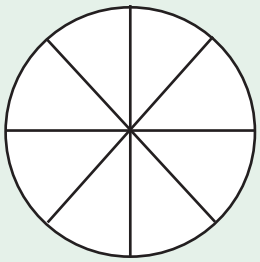
Complete the subtraction, then show the difference in the figure.

a $\frac{2}{3} - \frac{1}{3} = \frac{1}{3}$

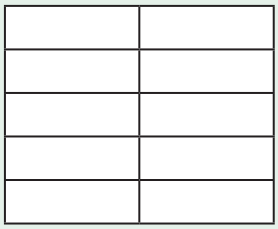


b $\frac{3}{5} - \frac{1}{5} = \frac{\quad}{\quad}$

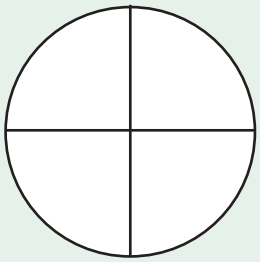
c $\frac{4}{8} - \frac{1}{8} = \frac{\quad}{\quad}$



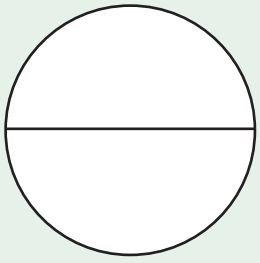
d $\frac{7}{10} - \frac{3}{10} = \frac{\quad}{\quad}$

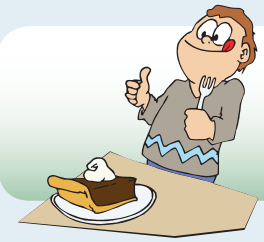


e $\frac{3}{4} - \frac{1}{4} = \frac{\quad}{\quad}$



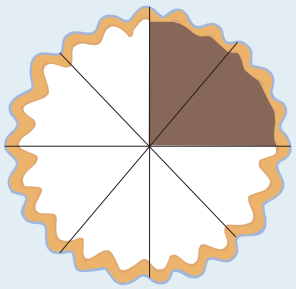
f $\frac{2}{2} - \frac{1}{2} = \frac{\quad}{\quad}$

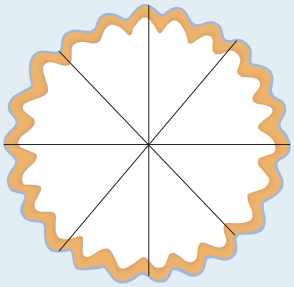


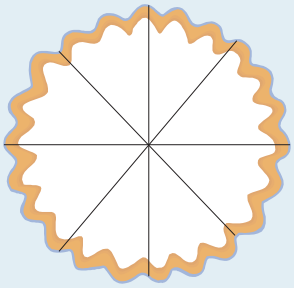


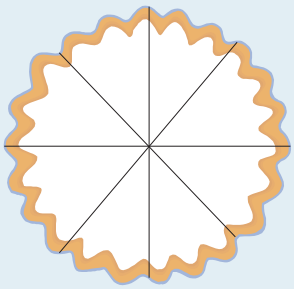
Shade each pie to show the subtraction or addition. Then find the difference or sum.

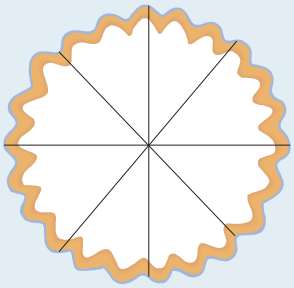
each slice  = $\frac{1}{8}$

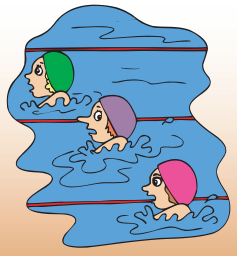
a $\frac{1}{8} + \frac{1}{8} =$  = $\frac{2}{8}$ of the pie.

b $\frac{5}{8} - \frac{3}{8} =$  = _____ of the pie.

c $\frac{5}{8} + \frac{1}{8} =$  = _____ of the pie.

d $\frac{1}{8} + \frac{3}{8} =$  = _____ of the pie.

e $\frac{8}{8} - \frac{1}{8} =$  = _____ of the pie.



$2.5 + 3.78 =$

$$\begin{array}{r} {\scriptstyle 1}\\ 2.50\\ +\ 3.78\\ \hline 6.28 \end{array}$$

Remember to line decimals up so the numbers from the same place values are added together.

Find the sum and solve the riddle below.

i
$$\begin{array}{r} 2.14\\ +\ .75 \end{array}$$

a
$$\begin{array}{r} 2.1\\ +\ 3.7 \end{array}$$

t
$$\begin{array}{r} 3.20\\ +\ .9 \end{array}$$

g
$$\begin{array}{r} 4.9\\ +\ 2.43 \end{array}$$

f
$$\begin{array}{r} .46\\ +\ .92 \end{array}$$

n
$$\begin{array}{r} 6.02\\ +\ 3.08 \end{array}$$

h
$$\begin{array}{r} 8.92\\ +\ .15 \end{array}$$

s
$$\begin{array}{r} 1.97\\ +\ 2.86 \end{array}$$

l
$$\begin{array}{r} 4.37\\ +\ 1.83 \end{array}$$

c
$$\begin{array}{r} 4.2\\ 2.3\\ +\ .66 \end{array}$$

e
$$\begin{array}{r} 10.25\\ 10.50\\ +\ 10.34 \end{array}$$

What is a spider doing on the baseball team?

7.16	5.8	4.1	7.16	9.07	2.89	9.1	7.33

1.38	6.2	2.89	31.09	4.83

$6.12 - 1.4 =$

$$\begin{array}{r} {\scriptstyle 5}\ {\scriptstyle 1} \\ \not{6}.12 \\ -\ 1.40 \\ \hline 4.72 \end{array}$$

Remember to line decimals up so the numbers from the same place values are subtracted from one another.

Find the difference and solve the riddle below.

a $50.21 - 9.82 =$ _____

y $30.8 - 14.15 =$ _____

i $9.83 - 1.76 =$ _____

o $23.5 - 18.7 =$ _____

v $42 - 9.42 =$ _____

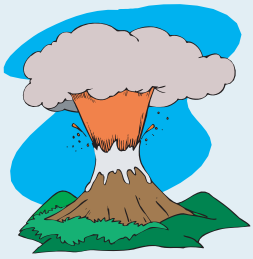
u $72.13 - 1.41 =$ _____

l What is the difference between 28.2° and 21.7°? _____

What did one volcano say to another?

_____	_____	_____	_____	_____
8.07	6.5	40.39	32.58	40.39

_____	_____	_____
16.65	4.8	70.72



Customary Units

Measure Length

12 inches (in.) = 1 foot (ft)
3 feet = 1 yard (yd)
5,280 feet = 1 mile (mi)

A smiley face sticker is about 1 inch wide.

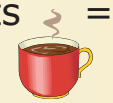
A large radish weighs about 1 ounce.

Measure Weight

16 ounces (oz) = 1 pound (lb)

Measure Capacity

2 cups (c) = 1 pint (pt)
2 pints = 1 quart (qt)
4 quarts = 1 gallon (gal)



A mug of hot chocolate holds about 1 cup.

Choose the most appropriate unit of measure.

Write inches, feet, or miles.

1. the width of a postage stamp _____
2. the length of a magazine _____
3. the height of a building _____
4. the distance between two towns _____

Write ounces or pounds.

5. the weight of a cheese slice _____
6. a dog's weight _____
7. the weight of a chair _____

Write cups, pints, quarts, or gallons.

8. a mug of coffee _____
9. a bathtub _____
10. a large carton of orange juice _____

Mixed Review

Use a piece of paper to find each answer. Then complete the puzzle on the next page.

Across

1
42
+ 39
81

3
803
- 149

6
34
x 52

10
$5\overline{)200}$

11
6,126
+ 1,924

12
427
- 235

13
614
x 6

14
$6\overline{)84}$

15
263
+ 149

20
900
- 155

21
67
x 4

23
98
+ 67

24
10,000
- 1

Down

1
932
- 89

2
213
x 5

3
9,291
- 2,447

4
$5\overline{)250}$

Match the problem number from the previous page and below to complete the puzzle. Fill in the correct number of spaces for each answer.

5
15,008
x 3

7
803
- 89

9
82
x 10

14
8)136

16
411
- 236

17
123
x 3

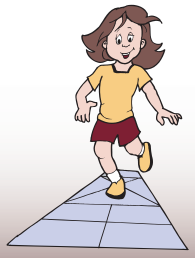
18
37
+ 54

19
7)315

21
100
- 71

22
24
+ 65

1 8	2 1	■	3	4	5	■	6	7	8	9
10		■	11				■	12		
13				■		■	14		■	
■		■	15	16		■		■	17	■
18	■	19	■	20			■	21		22
23			■		■	■	24			



3 x 5,647 = 16,941

Multiply the ones, regroup.
Multiply the tens, regroup.
Multiply the hundreds, regroup.
Multiply the thousands, regroup.

	Th	H	T	O
	1	1	2	
	5,	6	4	7
x				3
	16,	9	4	1

1
2,317
x 2

2
1,324
x 3

3
2,222
x 5

4
1,062
x 6

5
4,116
x 2

6
5,394
x 8

7
1,252
x 7

8
2,592
x 9

9
5,416
x 4

10
3,614
x 6

11
5,400
x 5

12
2,317
x 8

13
1,730
x 7

14
4,922
x 9

15
5,011
x 3

16
9,999
x 8

12,110	8,764	8,232	3,972	5,819	18,536	15,033	4,634	44,298
21,684	11,110	23,328	6,372	27,000	21,664	43,152	79,992	

_____

Write the number that is not an answer from the problems above.

Connections

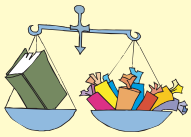
Look at the first pair and discover a relationship and use that information to complete the second relationship.

1	10 is to 100	as	100 is to _____
2	2 is to 4	as	1 is to _____
3	156 is to 651	as	273 is to _____
4	penny is to .01	as	nickel is to _____
5	$2\frac{1}{2}$ is to $\frac{5}{2}$	as	$6\frac{3}{4}$ is to _____
6	$\frac{2}{4}$ is to $\frac{1}{2}$	as	$\frac{6}{8}$ is to _____
7	.3 is to $\frac{3}{10}$	as	.9 is to _____
8	$7 is to $7.00	as	$19 is to _____
9	12 inches is to 1 foot	as	36 inches is to _____
10	5 is to 5:30	as	1:15 is to _____
11	16 oz is to 1 lb	as	1,000 g is to _____
12	triangle is to 3 sides	as	octagon is to _____

Complete the multiplication problems in the table. Then find and record 8 pairs of equal products by their column and row in the box below.

	A	B	C	D
4	15 x 15	81 x 3	96 x 2	26 x 8 208
3	52 x 4 208	24 x 8	24 x 20	36 x 27
2	12 x 81	95 x 3	24 x 12	45 x 5
1	27 x 9	16 x 30	48 x 6	19 x 15

1. A3 & D4
2. _____ & _____
3. _____ & _____
4. _____ & _____
5. _____ & _____
6. _____ & _____
7. _____ & _____
8. _____ & _____



In the table, find and record 8 pairs of equivalent fractions by their column and row in the box below.

	A	B	C	D
4	$\frac{1}{4}$	$\frac{4}{8}$	$\frac{10}{12}$	$\frac{6}{16}$
3	$\frac{9}{12}$	$\frac{2}{6}$	$\frac{6}{9}$	$\frac{5}{6}$
2	$\frac{9}{24}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{4}{16}$
1	$\frac{2}{3}$	$\frac{6}{10}$	$\frac{1}{3}$	$\frac{9}{15}$

1. A4 & D2
2. _____ & _____
3. _____ & _____
4. _____ & _____
5. _____ & _____
6. _____ & _____
7. _____ & _____
8. _____ & _____

In the table, find and record 8 pairs of equal values by their column and row in the box below.

	A	B	C	D
4	$\frac{1}{2}$	$\frac{5}{100}$	.05	$\frac{3}{1,000}$
3	5.00	$\frac{5}{1,000}$	.3	3.0
2	.03	3	.005	5
1	.003	$\frac{3}{10}$	.5	$\frac{3}{100}$

1. B1 & C3
2. _____ & _____
3. _____ & _____
4. _____ & _____
5. _____ & _____
6. _____ & _____
7. _____ & _____
8. _____ & _____

Find the difference. Then match the answer with the letter on the steps of the ladder and write it in the box below each problem.

a. 134
b. 571
c. 529
d. 501
e. 462
f. 443
g. 638
h. 378
i. 241
j. 372
k. 164
l. 328

1 567 - 124 = 443 f

2 382 - 10 =

3 827 - 298 =

4 280 - 39 =

5 514 - 136 =

6 405 - 271 =

7 527 - 199 =

8 806 - 305 =

9 700 - 129 =

10 346 - 182 =

11 590 - 128 =

12 916 - 278 =

Find the product. Then match the answer with the letter on the rock wall and write it in the box below each problem.

1 68 x 5 = 340 → c

2 34 X 6 =

3 83 X 7 =

4 73 X 9 =

5 89 X 4 =

6 74 X 3 =

7 52 X 36 =

8 36 X 25 =

9 43 X 82 =

10 67 X 58 =

11 39 X 27 =

12 85 X 34 =

a. 900

b. 3,886

c. 340

d. 2,890

e. 657

f. 222

g. 204

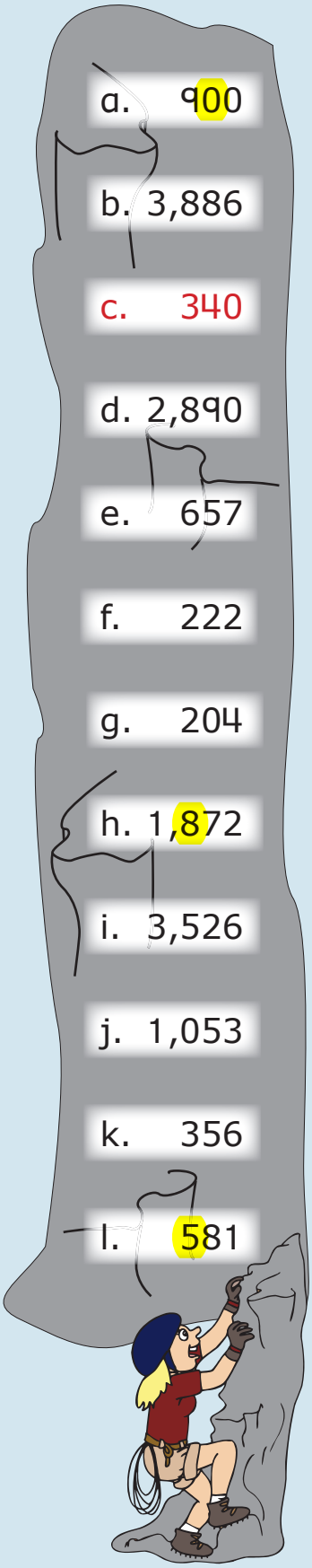
h. 1,872

i. 3,526

j. 1,053

k. 356

l. 581



$$\begin{array}{r} 38 \\ 4\overline{)152} \\ -12 \\ \hline 32 \\ -32 \\ \hline \end{array}$$

check $\begin{array}{r} 38 \\ \times\ 4 \\ \hline 152 \end{array}$

X	1	2	3	4	5	6	7	8	9
1	1	2	3	4	5	6	7	8	9
2	2	4	6	8	10	12	14	16	18
3	3	6	9	12	15	18	21	24	27
4	4	8	12	16	20	24	28	32	36
5	5	10	15	20	25	30	35	40	45
6	6	12	18	24	30	36	42	48	54
7	7	14	21	28	35	42	49	56	63
8	8	16	24	32	40	48	56	64	72
9	9	18	27	36	45	54	63	72	81

Practice division to find the quotient. Match the letter with each problem to the answers below to see a message.

r $5\overline{)145}$

l $6\overline{)192}$

k $8\overline{)352}$

t $9\overline{)216}$

p $3\overline{)51}$

e $2\overline{)158}$

s $3\overline{)207}$

o $4\overline{)296}$

v $7\overline{)357}$

b $6\overline{)96}$

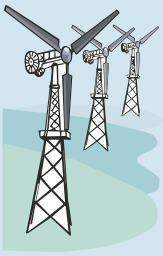
n $8\overline{)584}$

i $9\overline{)414}$

d $6\overline{)300}$

w $4\overline{)356}$

g $7\overline{)434}$



44	73	74	89	32	79	50	62	79	46	69	17	74	89	79	29

SKILL TUNE-UP

Work the problems and answer the riddle below.

n

$$\begin{array}{r} 34 \\ 256 \\ +\ 829 \end{array}$$

a

$$\begin{array}{r} 427 \\ 1{,}234 \\ +\ 103 \end{array}$$

p

$$\begin{array}{r} 942 \\ 83 \\ +\ 1{,}216 \end{array}$$

d

$$\begin{array}{r} 520 \\ 357 \\ +\ 986 \end{array}$$

t

$$\begin{array}{r} 218 \\ -\ 29 \end{array}$$

w

$$\begin{array}{r} 824 \\ -165 \end{array}$$

i

$$\begin{array}{r} 700 \\ -\ 136 \end{array}$$

e

$$\begin{array}{r} 1{,}899 \\ -\ 986 \end{array}$$

b

$$\begin{array}{r} 56 \\ \times\ 27 \end{array}$$

k

$$\begin{array}{r} 34 \\ \times\ 59 \end{array}$$

u

$$\begin{array}{r} 27 \\ \times\ 86 \end{array}$$

r

$$\begin{array}{r} 19 \\ \times\ 45 \end{array}$$

h

$5\overline{)125}$

s

$4\overline{)196}$

c

$8\overline{)184}$

v

$7\overline{)252}$

Why did the hockey player stay in bed?

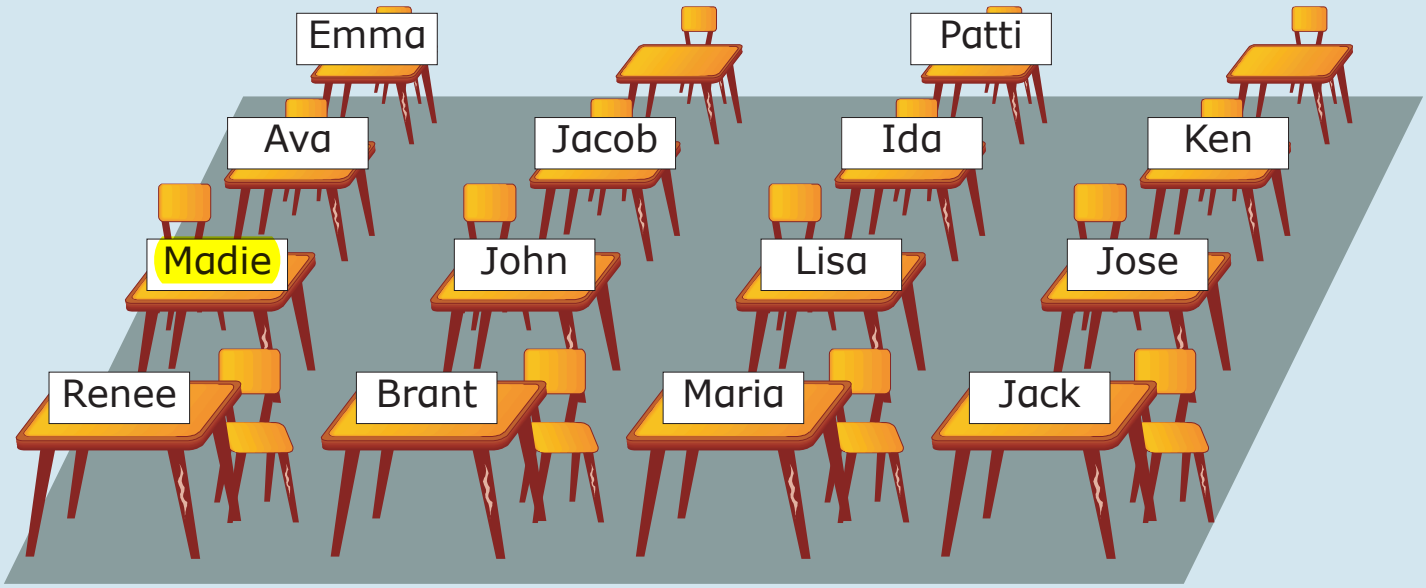
25	913	25	1,764	1,863

23	25	564	23	2,006	913	1,119	2,241	2,322	23	2,006	49

Math Detective®*

Filling the Food Pantry

Mrs. Jones is collecting for charity in her 4th-grade class. After reading a story about a hungry child, the class talked about how they could collect money for the local food pantry which was next door to the school. Everyone said they had a quarter to give. Before Mrs. Jones passed the jar around, she put in $5.00. There were 14 students present that day and everyone gave a quarter. In the class were 8 girls and 6 boys. The seating chart is shown below.



* For more activities like this, please see our *Math Detective*® series.

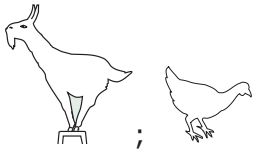
Page 324 4 times; small boat = 5 sq. centimeters; large boat = 20 sq. centimeters

Page 325

Number of Goats	Total Number of Legs
1	4
2	8
3	12
4	16
5	20
6	24
7	28
8	32

Number of Chickens	Total Number of Legs
1	2
2	4
3	6
4	8
5	10
6	12
7	14
8	16

; 5 goats and 6 chickens;
More than one correct answer, sample answers:



Page 326 1st Grade $.72; 2nd Grade $.54; 3rd Grade $.48;
4th Grade $ 2.16; 5th Grade $.36

Page 327 2. k; 3. a; 4. g; 5. c; 6. l; 7. h; 8. d; 9. j; 10. e; 11. i; 12. b

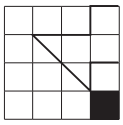
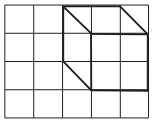
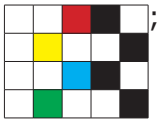
Page 328 2. j; 3. c; 4. i; 5. h; 6. a; 7. l; 8. d; 9. b; 10. k; 11. e; 12. g

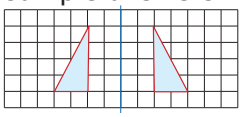
Page 329 1. c; 2. a

Page 330 2. g; 3. l; 4. e; 5. k; 6. f; 7. h; 8. a; 9. i; 10. b; 11. j; 12. d

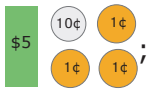
Page 331 1. b; 2. a

Page 332 2. f; 3. b; 4. l; 5. a; 6. h; 7. d; 8. j; 9. e; 10. i; 11. c; 12. g

Page 333 1.  ; 2.  ; 3.  ; 4. More than one correct answer, sample answers



Page 334 1. perpendicular; 2. difference; 3. 5X2; 4. 100; 5. acute angle;
6. 5/6; 7. 212°F; 8. 1 cm; 9. 1 year; 10. $1.00

Page 335 2. $5.13,  ; 3. $8.35,  ; 4. $5.50, 

Page 336 r. 29; l. 32; k. 44; t. 24; p. 17; e. 79; s. 69; o. 74; v. 51; b. 16; n. 73;
i. 46; d. 50; w. 89; g. 62; knowledge is power

Page 337 n. 1,119; a. 1,764; p. 2,241; d. 1,863; t. 189; w. 659; i. 564; e. 913;
b. 1,512; k. 2,006; u. 2,322; r. 855; h. 25; s. 49; c. 23; v. 36;
he had chicken pucks

Page 338 Answers will vary, sample answer: 4, 6; 4 x 6 = 24

Page 339 Answers will vary, sample answer: .25 + .50 + .10 + 1.50 + 6.00 = 8.35 Win

Page 340 1. 10 squares; 2. 50 squares; 3. 20 squares;
4. 5 squares; 5. 14 squares; 6. 1 square; 7. 100

Page 341 Paths may vary. Here is one example: 3, 17, 29, 41, 37, 11, 19, 47, 29, 5, 13, 47, 23, 59, 41

Page 342 1. $7.50; 2. $5.75; 3. $10; 4. $9.97; 5. 2 shirts, 1 cap, and 1 book

Page 343 1. 21 ÷ 3 = 7; 2. 18 ÷ 3 = 6;
3. 28 ÷ 4 = 7; 4. $27 ÷ 3 = $9